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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(54) Title: APPARATUS AND METHOD FOR MEASURING PULSE TRANSIT TIME
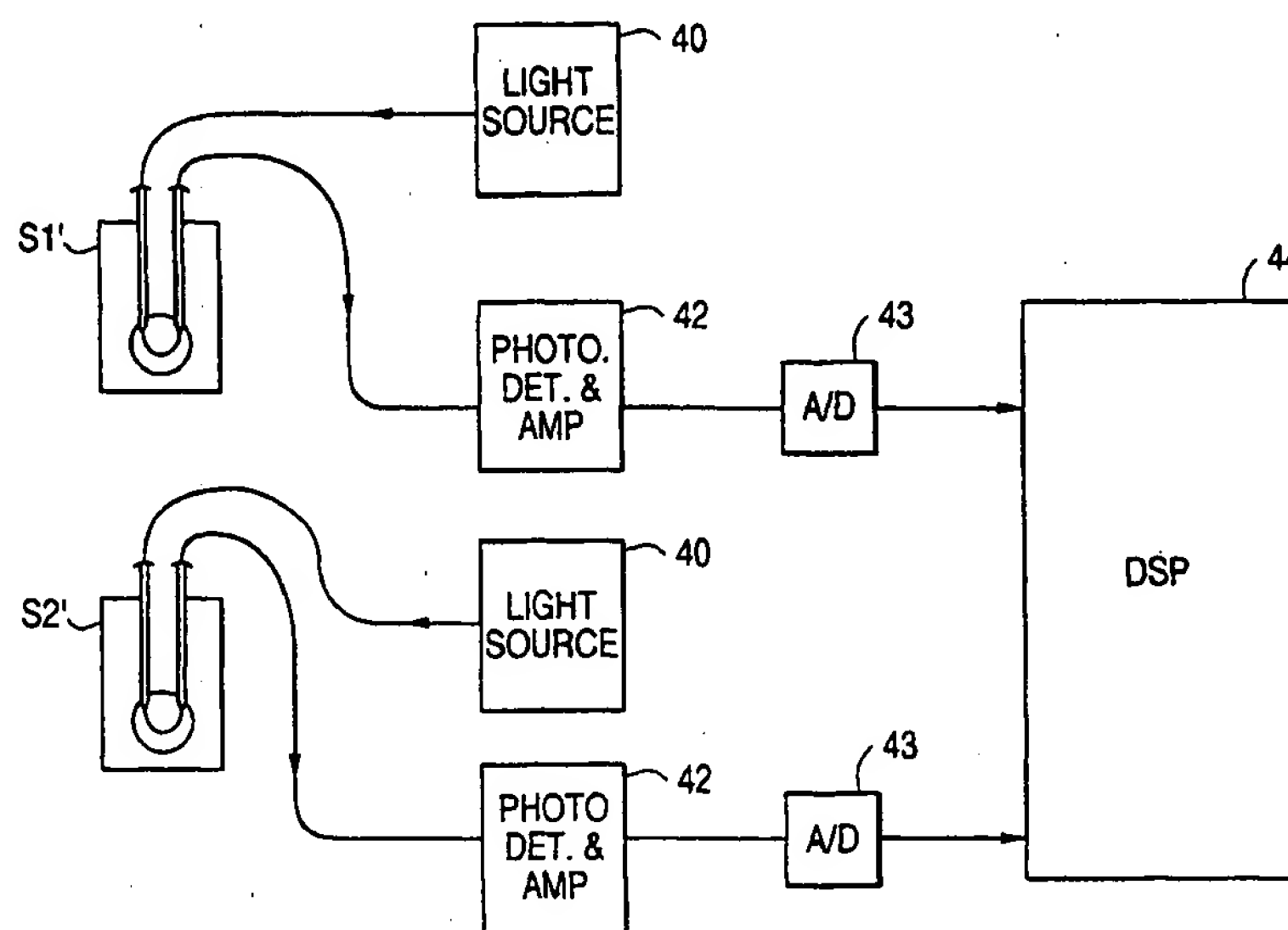
(57) Abstract

In a method of measuring pulse transit time of a living subject, first and second pulse wave signals are produced by sensing the pulse at first and second pulse points, respectively, the first and second pulse points being spaced from one another. The first and second pulse wave signals are differentiated, and based on the results, corresponding points of the first and second pulse wave signals are selected (e.g., points of maximum slope). The time delay between the selected points is determined, thus yielding the pulse transit time. A preferred apparatus measures pulse transit time using at least one fiberoptic pulse sensor including a fused–fiber coupling region having at least a portion that can be deflected without putting the coupling region under tension.